

Work Order ID 161506

Wednesday, May 17, 2017 9:17:52 AM

161506

Page 1

Item ID: D2646

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Cap

Start Date: 5/17/2017 Start Qty: 50.00

50

Cust Item ID:

Required Date: 6/7/2017 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan:

DAS

13

9-89

Date: MAY 17 2017

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2646	Rev C

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 36349 1-Spin as per Dwg D2646 2-Material release
note required
Vendor: Sieg's Manufacturing

MAY 17 2017

DAS

13

9-89

50

110

0.00

110

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

1.00

Packaging

Ensure Material Release Note is attached

50x SP 17-62

120

0.00

120

QC

QC6- All purchased or subcontracted products

Memo

0.00

Quality Control

DAS

38

9-89

50

JUN 05 2017

Work Order ID 161506

Wednesday, May 17, 2017 9:17:52 AM

161506

Page 2

Item ID: D2646 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Cap
Start Date: 5/17/2017 Start Qty: 50.00 ***50*** Cust Item ID:
Required Date: 6/7/2017 Req'd Qty: 50.00 ***50*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Small Fab					<u>50</u>	<u>Ø</u>	JUN 07 2017	DAS 19 9-30
Small Fab									
	Memo	1.50							
Small Fab	1-Drill using DT8026 as per Dwg D2646.2-Open holes to .297 as per Dwg D2646.3-Deburr								
140		0.00							
140	QC5- Inspect part completeness to step on W/O					<u>50</u>			DAS 38 JUN 07 2017
QC									
Quality Control	Memo	1.00							
150		0.00							
150	Chemical Conversion Coat per QSI005 4.1					<u>(50)</u>	<u>Ø</u>	2017-08-15	JSL BEB
HandFinish									
Hand Finishing	Memo	1.33							

Work Order ID 161506

Wednesday, May 17, 2017 9:17:52 AM

161506

Page 3

Item ID: D2646 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Cap
Start Date: 5/17/2017 Start Qty: 50.00 ***50*** Cust Item ID:
Required Date: 6/7/2017 Req'd Qty: 50.00 ***50*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per OSI005.4.39Alum <i>M.13504.</i> Memo START TIME: <u>1:30</u> FINISH TIME: <u>2:00</u> OVEN TEMPERATURE:	0.00 0.60				<i>[30 4/17-08-29] - 20</i> <i>25 9:09</i>		<i>Blue</i>	
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.50		<i>used 5 w +</i>		<i>25</i>		<i>w/o 165596</i> <i>w 17/08/31</i>	<i>DAS 36 9:00</i>
180 *180* Small Fab Small Fab	Small Fab Memo Install inserts as per Dwg D2646	0.00 0.96				<i>30</i>	<i>Ø</i>	<i>AUG 31 2017</i>	<i>DAS 19 9:00</i>

Work Order ID 161506

Wednesday, May 17, 2017 9:17:52 AM

161506

Page 4

Item ID: D2646 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Cap
Start Date: 5/17/2017 Start Qty: 50.00 ***50*** Cust Item ID:
Required Date: 6/7/2017 Req'd Qty: 50.00 ***50*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 1.00				30			DAS 38 SEP 04 2017
200 *200* Packaging Packaging	Identify as per dwg & Stock Location: <u>FP-001</u> Memo LOCATION : FP001	0.00 0.50							x30 of 116/09/17
210 *210* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 5.00							17/9/16 close for 30 - 5 used rush for turkeys

DAS
21
9-89

SEP 05 2017

Picklist Print

Wednesday, May 17, 2017 9:17:51 AM

Page 1
T

Work Order ID: 161506

161506

Parent Item: D2646

D2646

Parent Item Name: Aft Cap

Start Date: 5/17/2017

Required Date: 6/7/2017

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP: G05.08.22Hole size revised in Step 5KJ/JLM
IPP Rev:H Changed Inserts 07-02-19 JLM
IPP rev I changed inserts 07.06.11 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

ALS7-1032-130

AELS8-1032-130

Purchased

No

110

Each

2,507.000

2

100

**

17-9-1
Sh

AI S7-1032-130

Rivnut

AL S4-1032-130

not pulled

Location

Loc Qty

Loc Code

FG	100	
M128649	50	
M136048	50	
FP001	2199	137820
M128649	155	
M136579	2044	
ST556	208	
M136048	208	

60

D2646P

Purchased

No

180

Each

0.0000

1

50

**

50x SP 17-6-2

D2646P

Aft Cap

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

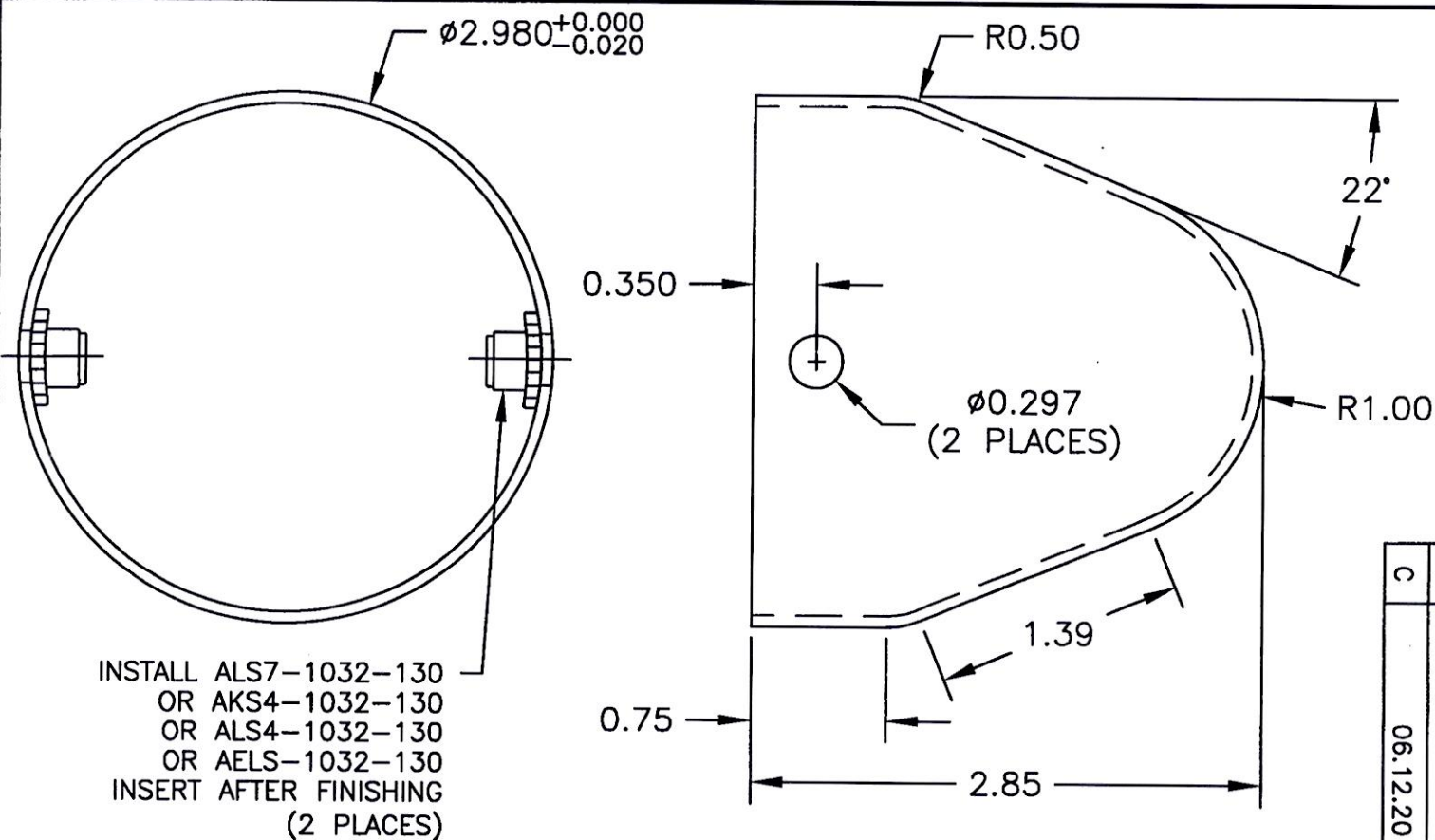
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

DART

DESIGN	DS	DRAWN BY	PH	DART AEROSPACE USA, INC.	REV. C
CHECKED		APPROVED		DRAWING NO. D2646	SHEET 1 OF 1
DATE	06.12.20	TITLE	AFT CAP	SCALE	1:1
A	97.03.25	NEW ISSUE			
B	05.04.01	CHANGE TO CLOSED INSERTS			
C	06.12.20	CHANGE TO OPEN ENDED INSERTS			



INSTALL ALS7-1032-130
OR AKS4-1032-130
OR ALS4-1032-130
OR AELS-1032-130
INSERT AFTER FINISHING
(2 PLACES)

D2646 AFT CAP

- 1) MATERIAL: ALUMINUM 1100-0 0.063 THICK (QQ-A-250/1)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED
07.02.02

DAS
13
9-89

MAY 17 2017

W10.14/506



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO36349**

Purchase Order Date 5/17/2017 11:50:43 AM

PO Print Date 5/17/2017

Page Number 1 of 2

Order From :

VC-SIE001

Ship To : DART AEROSPACE LTD

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
MAY 17 2017

Contact Name

Vendor Phone 604 530 7455

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

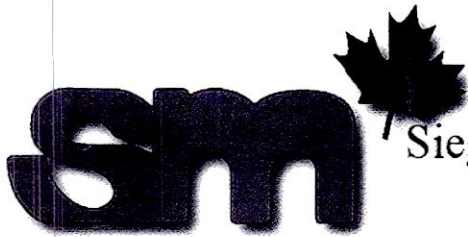
FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	D2646P	Aft Cap	6/7/2017 Yes 6/7/2017		50.00 Each	\$6.70	\$335.00
	AS PER DWG D2646 REV. C B161506						
						Line Total:	\$335.00
3	71401-45	PROCUREMENT QUALITY CLAUSES	6/7/2017 No 6/7/2017		1.00	\$0.00	\$0.00
	Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality documents						

Note:

5/17/2017



Sieg's Manufacturing Ltd.
Quality Metal Spinning
Website: www.siegsmf.com

6236 205 Street Langley, British Columbia, Canada V2Y 1N7
Phone: (604) 530-7455 ~Email: accounts@siegsmf.com

Packing Slip

Packing Slip No.: 48169
Date: 06/01/2017
Page: 1

Sold to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7		Ship to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7		
Order No.: 36349		Sold By: LOWEY, ARLA		
Shipped By:		Ship Date: 06/01/2017		
Tracking No.:				
Item No.	Unit	Description	Quantity	Backorder quantity
d2646P ✓	Each	Aft Cap. ✓	50 ✓	
SP 17-6-2				
Comment:				



Sieg's Manufacturing Ltd.
Quality Metal Spinning

6236 205 Street Langley, B.C. Canada V2Y 1N7
Ph#: (604)530-7455 arlalowey@siegsmfg.com

INSPECTION REPORT

Date: June 1 2017

Customer: Dart Areospace

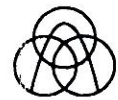
Packing Slip: 48169

Part#:	Quantity	Material	Check holes	Insp. By.
D2646	50	14g 1100	N/a	AL

Notes:

Material Certification Attached: ____YES____

thyssenkrupp Materials NA
Copper and Brass Sales



thyssenkrupp

ThyssenKrupp Materials NA 19044 95A Avenue Surrey BC V4N 4P2

DELIVERY NOTE



SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY BC V2Y 1N7

DATE: 02/17/2017
DOC. NO: 2405026975*
BOL. NO: 2405026975
ORDER NO: 1403096944
YOUR P/O: 2083
CUSTOMER NO: 10007550
Route: 308UM
CONTACT: Timothy Skidmore
TEL: 800-926-2600
FAX: 888-926-2600
EMAIL: timothy.skidmore@thyssenkrupp.com

PST-1001-1682 OLD PST# R292133

Deliveries are carried out for your account and risk acc. to our Gen. Terms & Cond. of Delivery and Payment.

ITEM	DESCRIPTION	NET QTY1 / QTY2	PACKAGE NO.
0010	ALFLR01243 1100 Aluminum O Sheet 0.06300 (+ -.0035) X Width 48.0000 (+ -.125) X Length 144 (+ -.125) Nominal Chemistry/Act Physical Standard Packaging	100 PC 4,267.469 lb	1007149777 1007149792
TAGNUM	QTYUOM	VEND	VENDPO
1006859635	74PC	SKANA	ALU 5400320485
ROHS COMPLIANT;ASTM B209 2014			11U808
1006859638	26PC	SKANA	ALU 5400320485
ROHS COMPLIANT;ASTM B209 2014			11U808

Total Gross Weight 4567.469 lb

All items, not declared as partial delivery, are final quantities.

Delivery Terms: PPD gem. Incoterms 2000 Prepaid

CERTIFICATION OF COMPLIANCE

We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state.

For MSDS sheets go to www.copperandbrass.com. We hereby certify that the material above complies with the above specifications

Tomas Sanchez - Director of Quality Assurance



Skana Aluminum Co
Rolling Mill - Certified Metal
Certification of Properties and Analysis

Physical test: 11U808 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales

6156 PO No: 5400320485-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..	..	0.05	..	..	..	..	..	..	0.05	..
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	..	..

Master Coil #	1	2	3	4							
Tensile Strength KSI	14.40	13.76	14.64	13.94							
Yield Strength KSI	5.18	5.16	5.20	5.03							
% Elong. in 2 in.	32.00	33.00	32.20	32.90							
Master Coil #											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											
Master Coil #											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											
Master Coil #											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Remarks: Tested By: JD

Certified Date: 04 Nov 2016

Certified By
Lab Manager

Donna Compton

JD .063 X 48.000 MF 4/4

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-14 SPECS.

BLANKS: COILS TO PRESSROOM

Friday, November 04, 2016

Melted/Manufactured in USA

QF 824-1-1

Page 1 of 1

From: TK Materials CA, Ltd.

Cust. SIEGS MANUFACTURING LTD.

CstAr

Wgt.: 4,267.469 LB

Del.: 2405026975

CstOr 2083

Date 02/07/2017

Tomas Sanchez

Skana Aluminum Company

Rolling Mill - Certified Metal

Certification of Properties and Analysis

Physical test: 11U808 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales

6156 PO No: 5400320485-R01

Chemical:	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range:	..	..	0.05	..	..	..	..	..	..	..	..
Max Range:	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	..

1	14.40	5.18	32.00	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.15	.39	.10	.01	.01	.00	.01	.01	.01	.00
				Al									
				99.20									
2	13.76	5.16	33.00	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.15	.39	.10	.01	.01	.00	.01	.01	.01	.00
				Al									
				99.20									
3	14.64	6.20	32.20	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.15	.39	.10	.01	.01	.00	.01	.01	.01	.00
				Al									
				99.20									
4	13.94	5.03	32.90	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.15	.39	.10	.01	.01	.00	.01	.01	.01	.00
				Al									
				99.20									

Remarks: Tested By: JD

Certified Date: 04 Nov 2016

Certified By: Donna Compton
Lab Manager

JD .063 X 48.000 MF 4/4

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-14 SPECS.

BLANKS: COILS TO PRESSROOM

Friday, November 04, 2016

Melted/Manufactured in USA QF 824-1-2

From: TK Materials CA, Ltd.

Cust. SIEGS MANUFACTURING LTD.

CstAr

Wgt.: 4,267.469 LB

Del.: 2405026975

CstOr 2083

Date 02/07/2017

Tomas Sanchez

ThyssenKrupp Materials NA
Copper and Brass Sales Division
19044 95A Avenue
SURREY BC V4N 4P2
Tel.: +16048823493 Fax: +16048820686



Order number	Ord-pos	Del-pos	Part description
Customer PO	PO date	Quantity	Customer Part
MTR header	MTR type	Search criteria	Heat lot
			Sample number
C8A/1403096944	000010	900001	1100 Aluminum O Sheet 0.06300 (+-.0035)
2083	01/30/2017	74 ST	
Att_001.PDF	NCAP	930393817720160002	11U808
C8A/1403096944	000010	900002	1100 Aluminum O Sheet 0.06300 (+-.0035)
2083	01/30/2017	26 ST	
Att_001.PDF	NCAP	930393817720160003	11U808

Delivery number
2405026975
Date
02/06/2017

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY V2Y 1N7
CANADA